Appl. no. 10/598, 552

Inventor: Dielissen, J.

IN THE CLAIMS

Kindly replace the claims of record with the following full set of claims:

1. (Currently amended) Integrated circuit having a plurality of processing modules (M, S) and

an interconnect means (N) for coupling said plurality of processing modules (M, S) and for

enabling a packet based communication based on transactions between said plurality of

processing modules (M, S), wherein each packet comprises a first predetermined number of

subsequent words each having a second predetermined number of bits, wherein a first of said

plurality of processing modules (M) issues a transaction by sending at least one packet over said

interconnect means to a second of said plurality of processing modules (S), comprising:

at least one packet inspecting unit (PIU) for inspecting bits of said at least one packet to

determine bits not required for said issued transaction and for matching said not required bits in

said header of said at least one inspected packet related to a path over said interconnect with

other header bits related to said path of the same packet.

2. (original) Integrated circuit according to claim 1, wherein said at least one packet inspecting

unit (PIU) is adapted to match said not required bits with previous or following bits in the same

packet.

3. (original) Integrated circuit according to claim 2, wherein said at least one packet inspecting

unit (PIU) is further adapted to match said not required bits with corresponding bits in a previous

or following word in the same packet.

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4. (Previously presented) Integrated circuit according to claim 2, further comprising:

at least one network interface (NI) associated to said first of said plurality of processing

modules (I) for controlling the communication between said first of said plurality of processing

modules (I) and said interconnect means (N), wherein each of said at least one packet inspecting

units (PIU) is arranged in one of said network interfaces (NI).

5. (Currently amended) Method for packet switching control in an integrated circuit having a

plurality of processing modules (M, S) and an interconnect means (N) for coupling said plurality

of processing modules (M, S) and for enabling a packet based communication based on

transactions between said plurality of processing modules (M, S), wherein each packet comprises

a first predetermined number of subsequent words each having a second predetermined number

of bits, wherein a first of said plurality of processing modules (M) issues a transaction by

sending at least one packet over said interconnect means to a second of said plurality of

processing modules (S), comprising the steps of:

- inspecting bits of said at least one packet to determine bits not required for the issued

transaction and updating matching said not required bits of said at least one inspected packet

with other bits of the same packet, wherein said unused bits are related to a path over said

interconnection..

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